

## CLAIMS

### I CLAIM:

1. A windpower generating apparatus comprising:
  - a vertical support member;
  - a first arm assembly rotatably mounted on said support member so as to be transverse to said support member;
  - a second arm assembly rotatably mounted on said support member so as to be transverse to said support member, said second arm assembly being transverse to said first arm assembly;
  - a first plurality of vane members pivotally affixed to said first arm assembly; and
  - a second plurality of vane members pivotally affixed to said second arm assembly, each of said first and second plurality of vane members movable between an open position and a closed position relative to a wind direction.
2. The apparatus of Claim 1, said first arm assembly comprising:
  - a first strut; and
  - a second strut mounted in parallel relation to said first strut, said first plurality of vane members having a first pivot point connected to said first strut and a second pivot point connected to said second strut.

3. The apparatus of Claim 2, further comprising:  
a first bearing member connected to said first strut and rotatably mounted on said vertical support member; and  
a second bearing member connected to said second strut and rotatably mounted on said vertical support member.

4. The apparatus of Claim 3, said first arm assembly further comprising:  
a third strut connected to said first bearing member and extending outwardly therefrom in longitudinal alignment with said first strut; and  
a fourth strut connected to said second bearing member and extending outwardly therefrom in longitudinal alignment with said second strut.

5. The apparatus of Claim 4, said first arm assembly further comprising:  
a first panel affixed to an end of said first and second struts, said first panel extending transverse to said first and second struts.

6. The apparatus of Claim 5, said first arm assembly further comprising:  
a second panel affixed to an end of said third and fourth struts, said second panel extending transverse to said third and fourth struts, said second panel being in parallel planar relationship to said first panel.

7. The apparatus of Claim 6, each of said first and second panels being fixedly and non-pivotally mounted onto the respective struts.

8. The apparatus of Claim 1, each of said first plurality of vane members overlapping an adjacent vane in said closed position, each of said second plurality of vane members overlapping an adjacent vane in said closed position.

9. The apparatus of Claim 1, each of said first and second pluralities of vane members being in parallel planar relationship in said open position.

10. The apparatus of Claim 2, each vane of said first plurality of vane members having a line connected to an adjacent vane of said first plurality of vane members such that each vane of said first plurality of vane members between said first and second struts moves correspondingly with the adjacent vane between said open and closed positions.

11. The apparatus of Claim 10, said line being affixed to a corner of each vane opposite the respective pivot point.

12. The apparatus of Claim 1, further comprising:  
electrical energy generation means connected to said first and second arm assemblies,  
said electrical energy generation means for generating electricity relative to a speed of rotation of  
said first and second arm assemblies about said vertical support member.

13. The apparatus of Claim 12, said electrical energy generation means comprising:
- a gear box mounted on said vertical support member and having a connector extending to at least one of said first and second arm assemblies;
  - a flywheel alternator connected to said gear box, said flywheel alternator generating electrical energy; and
  - a battery electrically connected to said flywheel alternator.
14. A windpower generating apparatus comprising:
- a vertical support member;
  - a first strut rotatably mounted relative to said vertical support member;
  - a second strut rotatably mounted relative to said vertical support member in generally coplanar relationship to said first strut;
  - a third strut rotatably mounted relative to said vertical support member in generally longitudinal alignment with said first strut;
  - a fourth strut rotatably mounted relative to said vertical support member in generally longitudinal alignment with said second strut, each of said first strut and said second strut and said third strut and said fourth strut extending outwardly generally transverse to a longitudinal axis of said vertical support member;
  - a first vane member pivotally mounted between said first strut and said second strut, said first vane member movable between an open position and a closed position; and
  - a second vane member pivotally mounted between said third strut and said fourth strut, said second vane member movable between an open and closed position.

15. The apparatus of Claim 14, said first vane member comprising:  
a first vane having an edge pivotally connected to said first and second strut; and  
a second vane having an edge pivotally connected to said first and second struts, said  
first vane overlapping said second vane when in said closed position.

16. The apparatus of Claim 15, said first vane member comprising:  
a line connected to an opposite edge of each of said first and second vanes such that  
said first and second vanes move between the open and closed positions correspondingly.

17. The apparatus of Claim 14, each of said first and second vane members movable  
between the open and closed positions relative to a wind direction.

18. The apparatus of Claim 14, further comprising:  
a first panel non-pivotally affixed to an end of said first and second struts; and  
a second panel non-pivotally affixed to an end of said third and fourth struts.

19. The apparatus of Claim 18, said first panel having a planar surface extending  
transverse to a plane formed between said first and second struts, said second panel having a planar  
surface extending transverse to a plane formed between said third and fourth struts, said first panel  
being in generally planar parallel relationship to said second panel.

20. The apparatus of Claim 14, further comprising:

electrical energy generation means connected to at least one of said first strut, said second strut, said third strut and said fourth strut, said electrical energy generation means for generating electricity relative to a speed of rotation of the respective struts about the vertical support member.

add  
a'

09748094-122700